from the budget of both payers would raise by 579.5 thousand PLN (130.3 thousand €) in 2009 and 1.2 mln PLN (261 thousand €) in 2010. Depending on parameter changes, the budget would change by ± 17% and ±19% for NHS and both payers perspective, respectively. **CONCLUSIONS:** The reimbursement of vildagliptin will cause the raise of NHF expenses by 0.37% in 2009 and 0.70% in 2010 of the budget spent for oral drugs reimbursed in diabetes mellitus. For both payers' perspective, the reimbursement of vildagliptin will cause the raise expenses by 0.27% in 2009 and 0.53% in 2010 of the budget.

PDB15

COST OF AN EPISODE OF DIABETIC FOOT ULCER IN SPAIN

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OBJECTIVES: To estimate the health care direct costs of an episode of extensive superficial or deep uncomplicated foot ulcer of neuropathic origin in patients with diabetes in Spain and identify the key factors that influence total costs. **METHODS:** A retrospective observational study of patients with an episode of foot ulcer during the period from January 2007 through December 2008 in 10 Spanish centres was performed. Data about sociodemographic **characteristics, duration of the episode and** health care-related resources were considered. **The following resources were collected** from hospital records: inpatient hospitalisations, surgeries, outpatient visits (specialists and primary care physician), diagnostic procedures, laboratory tests, ulcer-related cures, antibiotics and orthotic devices. Unitary cost (€, year 2009 values) data were taken from a Spanish Database of Health Costs and the Catalogue of Medicinal Products. **RESULTS:** Ninety-two patients (29.3% with one or more previous ulcers) with a foot ulcer episode were identified. **The majority of cases were males (76.9%).** Patients' mean age was 65.20 ± 10.90 years and **50.0% of these were retired. Average** duration of an ulcer episode was 131 ± 123 days. Most prevalent comorbidities were arterial hypertension (62.0% of cases), diabetic retinopathy (41.3%), renal impairment (30.4%), dyslipidemias (25.0%) and myocardial infarction (19.6%). Concomitant infections during the episode were reported in 33.7% of patients. The average cost per patient and ulcer episode was €17,262 (95% confidence interval [CI], €11,315, €23,715). The most important categories of costs were for surgeries (€7054, 95%CI, €6043–€8200, 40.9% of costs), inpatient hospitalisations (€6197, 95%CI, €3605–€8878, 35.9% of total costs), and ulcer-related cures (€2864, 95%CI, €1127–€4759, 16.6% of total costs). Among surgeries, the most relevant were debridements and amputations. **CONCLUSIONS:** An episode of a neuropathic extensive superficial or deep uncomplicated diabetic foot ulcer generates a substantial economic burden, with a mean cost per patient of €17,262. Surgeries, hospitalisations and ulcer-related cures represent 93.4% of total costs.

PDB16

GLYCEMIC CONTROL IN THE INPATIENT SETTING: INSULIN ASPART COMPARED TO HUMAN BOLUS INSULIN

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OBJECTIVES: Poor glycemic control is associated with increased morbidity and mortality among hospitalized patients. Insulin aspart may be more effective in achieving glycemic control than human insulin. This study compares glycemic control, length of stay (LOS), hospital mortality, and charges for hospitalized patients receiving insulin aspart or human bolus insulin. **METHODS:** This study is a retrospective analysis of the *Health Facts*® database (Cerner Corporation, Kansas City, MO). *Health Facts* is a unique database built from hospital comprehensive clinical records including pharmacy, laboratory, emergency room, admission, and billing information from hospitals throughout the United States, all time-stamped and sequenced. The sample included 36,991 medical patients with discharge dates from January 1, 2004 through December 31, 2007. Patients were segmented into those who exclusively received insulin aspart (n = 4605, 12.5%) or human (n = 32386, 87.6%) bolus insulin. Outcomes of interest included blood glucose (BG) control (overall mean BG < 140 mg/dL), length of stay (LOS), in-patient mortality, and hospital charges (in $2007). Results were compared with t-tests or chi-square tests. **RESULTS:** Insulin aspart patients demonstrated better blood glucose control (34.22% vs. 30.78% with mean BG < 140 mg/dL, $p < 0.001$) even though they experienced increased illness as demonstrated by higher Charlson comorbidity scores (2.0 (1.7) vs. 1.9 (1.8), $p < 0.001$) and had more heart, kidney, and lung diseases diagnosed during their stay. Insulin aspart was also associated with shorter LOS (5.5 (5.4) vs. 6.3 (6.8) $p < 0.001$), lower mortality (3.8% vs. 8.7%, $p < 0.001$) and fewer total charges ($25,074 (28,775) vs. $33,472 (41704), $p < 0.001$). **CONCLUSIONS:** Insulin aspart patients appeared to have better glycemic control, shorter LOS, lower mortality and reduced hospital charges than patients on human bolus insulin. Multivariate adjustments are needed to confirm these findings but the unadjusted results suggest insulin aspart is associated with better outcomes than human bolus insulin.

PDB17

TREATMENT COSTS ATTRIBUTABLE TO BEING OVERWEIGHT OR OBESE IN U.S. DIABETIC PATIENTS: QUANTILE REGRESSION APPROACH

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OBJECTIVES: To estimate treatment costs attributable to overweight or obese status in diabetic patients in the U.S.A. **METHODS:** The data was drawn from the 2003–2006 Medical Expenditure Panel Survey. Adult patients (18–74 years-old) with diabetes were identified based on a self-reported diagnosis or ICD-9-CM code of 250. Patients with pregnancy, malignancy, kidney dialysis, immunodeficiency, or body-mass-index (BMI) <18.5 were excluded. Medical treatment costs included office based physician/outpatient visits, emergency room visits, or hospitalizations, excluding dental problems and injuries. The treatment costs attributable to being overweight ($25 \leq BMI < 30$) or obese ($BMI \geq 30$) at various points of the cost distribution were estimated using weighted quantile regression after controlling for demographics, comorbidities, and other study variables. Treatment costs attributable to being overweight/obese were calculated by the differences in the actual treatment costs for overweight/obese patients and the expected costs if obese patients were normal-weight patients using the study variable coefficients obtained from all patients. All costs were converted to 2006 U.S. dollars using price indices. Data were analyzed using SAS and SUDAAN. **RESULTS:** A total of 5338 patients with diabetes were selected for this study. Approximately 88% of the diabetic patients were overweight (31%) or obese (57%). Compared with normal-weight patients, the incremental treatment costs attributable to obesity were significantly higher by $35, $96, $196, $290, and $739 at the 10th, 25th, 50th, 75th, and 90th percentiles, respectively. Similar trends were found in overweight patients compared with those of normal-weight, but the attributable costs were not significantly different except at the 75th percentile point. **CONCLUSIONS:** The overall economic burdens attributable to being overweight and obese in diabetic patients were substantial and increased significantly in the upper tail of the treatment cost distribution. The important finding that the magnitude of attributable costs increased across the distribution of treatment costs would not have been possible without the quantile regression method.

PDB18

COST OFFSETS ASSOCIATED WITH USE OF EXENATIDE COMPARED TO GLARGINE FOR THE TREATMENT OF PATIENTS WITH TYPE 2 DIABETES

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OBJECTIVES: The clinical effectiveness of exenatide and glargine is well established for the treatment of type 2 diabetes (T2D). However, the relative economic and utilization impact of these therapies is uncertain. This study examined the cost offsets associated with the use of exenatide compared to glargine in patients with T2D. **METHODS:** A retrospective analysis was conducted using a large, managed care claims database. Adult patients with T2D who had initiated either exenatide (N = 9264) or glargine (N = 3791) therapy between April 1, 2005 and June 30, 2007 with pre- (6 months) and post-index (12 months) continuous eligibility were included. Annual mean total medical costs and several mean cost components were estimated using propensity score stratification to control for baseline demographic, clinical and resource utilization variables. Mean costs were estimated using nonparametric bootstrapping. **RESULTS:** Exenatide-treated patients had significantly lower total direct medical ($20,792 vs. $24,954, $p < 0.0001$), inpatient ($4,836 vs. $6,966, $p < 0.0001$), outpatient ($9,510 vs. $11,858, $p < 0.0001$), and emergency room (ER) costs ($96 vs. $131, $p = 0.04$). Exenatide-treated patients had higher total prescription costs ($6349 vs. $6000, $p = 0.0004$). Furthermore, exenatide-treated patients had significantly lower costs of hospitalization ($4802 vs. $6873, $p < .0001$) mainly due to lower macrovascular complications ($1620 vs. $2661, $p = 0.001$), and also lower office visit costs ($3317 vs. $4176, $p < 0.0001$) and hospital outpatient visits ($5144 vs. $6608, $p < 0.0001$) compared to glargine-treated patients. Although prescription costs of exenatide was higher than glargine ($1544 vs. $843, $p < 0.0001$), exenatide-treated patients incurred significantly lower costs of concomitant antidiabetic medications ($1283 vs. $1415, $p < 0.0001$) and other prescription medications ($3235 vs. $3438, $p = 0.015$) compared to glargine-treated patients. **CONCLUSIONS:** Patients who initiated exenatide treatment had significantly lower total medical costs mainly due to lower inpatient, outpatient and ER visits despite having higher total prescription costs. Although, the index-drug costs were higher for exenatide, cost savings were observed in hospitalizations, office visits, and hospital outpatient visits.

PDB19

TIME TO OPIOID USE AND HEALTH CARE COSTS AMONG PATIENTS WITH DIABETIC PERIPHERAL NEUROPATHIC PAIN WHO INITIATED DULOXETINE VERSUS OTHER TREATMENTS

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OBJECTIVES: To compare the use of opioids and health care costs between patients with diabetic peripheral neuropathic pain (DPNP) who initiated treatment with duloxetine versus other standard of care DPNP treatments. **METHODS:** This retrospective cohort study analyzed administrative claims database 2004–2006 from a large US commercially-insured population to assess opioid utilization and health care costs over